

**COMSATS University Islamabad, Lahore Campus**  
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**Research Productivity Data 2020**

**Department of Computer Science CUI-Lahore Campus**

Sr.#	Title	Authors	Journal Name	Volume/Issue	Page/	Dep-	IF/ISI	CIIT	REMARKS
					Article ID	Campus		Authors	
1	Modelling, Simulation and Optimization of Diagnosis Cardiovascular Disease Using Computational Intelligence Approaches	Siddiqui, Shahan Yamin <sup>1</sup> ; <b>Athar</b> , <b>Atifa</b> <sup>2</sup> ; Khan, <b>Muhammad Adnan</b> <sup>1</sup> ; Abbas, Sagheer <sup>1</sup> ; Saeed, Yousaf <sup>3</sup> ; Khan, Muhammad Farrukh <sup>1</sup> ; Hussain, Muhammad	Journal of Medical Imaging and Health Informatics,	Volume 10, Number 5	pp. 1005-1022(18)	CS-LHR	0.549	2	Published
2	Enabling Smart City With Intelligent Congestion Control Using Hops With a Hybrid Computational Approach	Sagheer Abbas, <b>Muhammad Adnan</b> Khan, <b>Atifa Athar</b> , Syed Ali Shan, Anwar Saeed, Tahir Alyas	The Computer Journal	bxaa068	<a href="https://doi.org/10.1093/comjnl/bxaa068">https://doi.org/10.1093/comjnl/bxaa068</a>	CS-LHR	1.077	2	Published
3	Gamification for Recruitment and Job Training: Model, Taxonomy, and Challenges	<b>Iqra Obaid</b> ; Muhammad Shoaib Farooq; Adnan Abid	IEEE Access	Volume: 8	65164 - 65178	CS-LHR	4.098	1	Published

4	Cloud-Based Breast Cancer Prediction Empowered with Soft Computing Approaches	<b>Farrukh Khan, Muhammad Adnan Khan, Sagheer Abbas, Atifa Athar, Shahan Yamin Siddiqui, Abdul Hannan Khan, Muhammed Anwaar Saeed, and Muhammad</b>	Journal of Healthcare Engineering	Volume 2020, Article ID 8017496	16 pages	CS-LHR	1.295	3	Published
5	Performance analysis of discrete wavelet transform for downlink non-orthogonal multiple access in 5G networks	U Ali, S Baig, <b>T Umer</b> , Z Ding	IET Communications	Volume 14, Number 10	pp. 1666-1674	CS-LHR	1.779	3	Published
6	Cyber Physical and Social Networks in IoV (CPSN-IoV): A Multimodal Architecture in Edge-Based Networks for Optimal Route Selection Using 5G Technologies	Ansif Arooj, Muhammad Shoaib Farooq, <b>Tariq Umer</b> , Ghulam Rasool, Bo Wang	IEEE ACCESS	8	<a href="#">33609-33630</a>	CS-LHR	4.098	2	Published

7	Role of IoT Technology in Agriculture: A Systematic Literature Review	Muhammad Shoaib Farooq, Shamyla Riaz, Adnan Abid, <b>Tariq Umer</b> , Yousaf Bin Zikria	MDPI Electronics	9(2)	319	CS-LHR	2.412	1	Published
8	Gesture image segmentation with Otsu's method based on noise adaptive angle threshold	Leyi Xiao, Honglin Ouyang, Chaodong Fan, <b>Tariq Umer</b> , Ramesh Chandra Poonia, Shaohua Wan	Springer -Multimedia Tools and Applications	14-Jan	page 1-22	CS-LHR	2.313	1	Published
9	Introduction to the special section on blockchain technologies for industrial Internet of Things (SI-bciot)	Shaohua Wan, <b>Tariq Umer</b> , Kim-Kwang Raymond Choo	Computers & Electrical Engineering	Volume 81	106538	CS-LHR	2.663	1	Published
10	A methodology for sender oriented anti-spamming	<b>Ahmad Adnan</b> , Azhar Anique, Naqvi Sajid, Nawaz Asif, <b>Arshad Samia</b> , <b>Zeshan Farukh</b> , Yousaf Mohammed, Salih Ali.O.M.	Journal of Intelligent & Fuzzy Systems	Vol :38,Issue:3	pp.2765-2776	CS-LHR	1.637	3	Published

11	X-ray image analysis for automated knee osteoarthritis detection	<b>Mahrukh Saleem,</b> Muhammad Shahid Farid, Saqib Saleem & Muhammad Hassan Khan	Signal, Image and Video Processing	<a href="https://doi.org/10.1007/s11760-020-01645-z">https://doi.org/10.1007/s11760-020-01645-z</a>		CS-LHR	1.894	1	Online Published
12	Multimodal Ensemble-Based Segmentation of White Matter Lesions and Analysis of Their Differential Characteristics across Major Brain Regions	Rathore, S., Singh, A., Bilello, M., Niazi, T., <b>Iftikhar, M. A.</b> , Rathore, B., & Chaddad, A.	Applied Sciences	Vol: 10, Issue: 6	1903	CS-LHR		2.217	1 Published
13	Glioma Grading via Analysis of Digital Pathology Images Using Machine Learning	Rathore, S., Niazi, T., <b>Iftikhar, M. A.</b> , & Chaddad, A.	Cancers	Vol: 12, Issue: 3		CS-LHR		6.2	1 Published
14	Nested Genetic Algorithm for Highly Reliable and Efficient Embedded System Design	A. Israr, M. Kaleem, S. Nazir, <b>H. T. Mirza</b> , H. A. Sorin	Design Automation for Embedded Systems, Springer	<a href="https://doi.org/10.1007/s10617-020-09234-6">https://doi.org/10.1007/s10617-020-09234-6</a>	1-37	CS-LHR	0.556		2 Published

15	Numerical analysis of stable and low cost perovskite solar cell with an enhanced inorganic electron and hole transport layers	S. Mehmood, M. Kaleem, S. Nazir, A. Israr and <b>H. T. Mirza</b>	Journal of Nanoelectronics and Optoelectronics		<a href="https://researchonline.gcu.ac.uk/en/publications/numerical-analysis-of-stable-and-low-cost-perovskite-solar-cell-w">https://researchonline.gcu.ac.uk/en/publications/numerical-analysis-of-stable-and-low-cost-perovskite-solar-cell-w</a>	CS-LHR	1.069	2	In-Press
16	Spam Review Detection using the Linguistic and Spammer Behavioral Methods	N. Hussain, <b>H. T. Mirza*</b> , I. Hussain, F. Iqbal and I.Memon	IEEE Access	18	53801-53816	CS-LHR	4.098	1	Published
17	Classification of Authentic and Tampered Video Using Motion Residual and Parasitic Layers	Mubbashar Saddique, Khurshid Asghar, <b>Usama Ijaz Bajwa</b> , Muhammad Hussain, Hatim A. Aboalsamh, <b>Zulfiqar Habib</b>	IEEE Access	Vol: 8, Issue: 1	pp: 56782-56797	CS-LHR	4.098	2	Published
18	Fast Character Modeling with Sketch-Based PDE Surfaces	Lihua You, Xiaosong Yang, Junjun Pan, Tong-Yee Lee, Shaojun Bian, Kun Qian, <b>Zulfiqar Habib</b> , <b>Allah Bux Sargano</b> , Ismail Kazmi, Jian J. Zhang	Multimedia Tools and Applications	Vol: 00, Issue: 0	pp: 1-27	CS-LHR	2.313	2	Published

19	Fast Learning through Deep Multi-Net CNN Model for Violence Recognition in Video Surveillance	Aqib Mumtaz, <b>Allah Bux Sargano,</b> <b>Zulfiqar Habib</b>	The Computer Journal	Vol: 0, Issue: 0	pp: 1-16	CS-LHR	1.077	2	Published
20	Human Action Recognition Using Deep Rule-Based Classifier	<b>Allah Bux Sargano,</b> Xiaowei Gu, Plamen Angelov, <b>Zulfiqar Habib</b>	Multimedia Tools and Applications	Vol: xx, Issue: xx	pp: xxx-xxx	CS-LHR	2.313	2	Published
21	Review of various tasks performed in the preprocessing phase of a Diabetic Retinopathy Diagnosis System	Muhammad Nadeem Ashraf, Muhammad Hussain, <b>Zulfiqar Habib</b>	Current Medical Imaging	Vol: 16, Issue: 4	pp: 397-426	CS-LHR	0.533	1	Published
22	How Secure is your Cloud: Classification of Security Threats & Countermeasures Within Cloud Computing.	<b>Atif Saeed,</b> <b>Muhammad Shahid,</b> Mohammed A. Alghamdi, Khalid Masood, Arfan Ali Nagra, Muhammad Asif	IJCSNS International Journal of Computer Science and Network Security	VOL.20 No.5, May 2020	21 Pages	CS-LHR	1.5	2	Published

23	Modelling, Simulation, and Optimization of Diabetes Type II Prediction using Deep Extreme Machine Learning	Rehman Bhatti, <b>Atifa Athar</b> , M. Adnan Khan, Sagheer Abbas, Areej Fatima, Attur-Rahman, Anwaar Saeed. , 27th Feb 2020	Journal of Ambient Intelligence and Smart Environments	Volume: Pre-Press	Pp: 1-14	CS-LHR	1.186	1	Published
24	Adaptive Bitrate Video Transmission over Cognitive Radio Networks Using Cross Layer Routing Approach	<b>A. Ali</b> , S. Tariq, L. Feng, M. Iqbal, <b>I. Raza</b> , M. H. Saddiqi, and A.K. Bashir	IEEE Transactions on Cognitive Communications and Networking	Volume: 6, Issue: 3	Page(s): 935 - 945	CS-LHR	4.574	2	Published
25	A Smart Health-care Monitoring System for Heart Disease Prediction Based on Ensemble Deep Learning and Feature Fusion	F. Ali, S. E. Sappagh, S. M. Riazul Islam, D. Kwak, <b>A. Ali</b> , M. Imran, K.S. Kwak	Information Fusion	Volume 63, November 2020	Pages 208-222	CS-LHR	13.66	1	Published

26	Dynamic Priority-Based Efficient Resource Allocation and Computing Framework for Vehicular Multimedia Cloud Computing	M. H. Siddiqi, A. Al-Dulaimi, <b>A. Ali</b> , S. F. Haider, F. Ali, and M. Iqbal,	IEEE Access	Vol. 8	81080-81089	CS-LHR	3.745	1	Published
27	A Context-aware and Intelligent Framework for the Secure Mission Critical Systems	U. Sikandar, M. Talha, S. Sarwar, M. Safyan, Z.U. Qayyum, Amjad Ali, M. Iqbal	Transactions on Emerging Telecommunications Technologies		1.594 DOI:10.1002/ett.3954	CS-LHR	1.594	1	Published
28	Impact of Gamification on Learning Outcome of Computer Science Majors,	<b>A. Ahmed</b> , <b>F. Zeeshan</b> , R. Marriam, <b>A. Ali</b> , A. Samreen	ACM Transactions on Computing Education	Vol. 20, Issue 2	<a href="https://doi.org/10.1145/383456">https://doi.org/10.1145/383456</a>	CS-LHR	1.721	3	Published
29	Detecting Congestive Heart Failure by extracting Multimodal Features and employing Machine Learning Techniques	L. Hussain, I.A. Awan, W. Aziz, S. Saeed, <b>A. Ali</b> , <b>F. Zeeshan</b> , and K.S. Kwak (2020)	BioMed Research International	Volume 2020	19-Jan	CS-LHR	2.276	2	Published



30	A Hybrid Semantic Knowledge Integration and Sharing Approach for Distributed Smart Environments	<b>Furkh Zeshan, Adnan Ahmad,</b> Abdel-Haleem Abdel-Aty, Fahd Algarni and Ashfaq Ahmad	Sensors	20(20)	<a href="https://doi.org/10.3390/s20205918">https://doi.org/10.3390/s20205918</a>	CS-LHR	3.275	2	Published
31	Development of Hepatitis Disease Detection System by Exploiting Sparsity in Linear Support Vector Machine to Improve Strength of AdaBoost Ensemble Model	Wasif Akbar, Weiping Wu, Sehrish Saleem, <b>Muhammad Farhan,</b> Muhammad Asim Saleem, Ashir Javeed, Liaqat Ali	Mobile Information Systems	Special issue, Volume 2020	<a href="https://doi.org/10.1155/2020/8870240">https://doi.org/10.1155/2020/8870240</a>	CS-LHR	1.58.	1	Published
32	Autonomous parking-lots detection with multi-sensor data fusion using machine deep learning techniques	K. Iqbal, S. Abbas, M. A. Khan, <b>A. Athar,</b> M. S. Khan <i>et al</i>	Computers, Materials & Continua	vol. 66, no.2	pp. 1595–1612	CS-LHR	4.89	1	Published
33	Does one size fit all? Investigating the Effect of Group Size and Gamification on Learners' Behaviors in Higher Education	<b>Adnan Ahmad, Furkh Zeshan</b> et, al.	Journal of Computing in Higher Education		<a href="https://doi.org/10.1007/s12528-020-09266-8">https://doi.org/10.1007/s12528-020-09266-8</a>	CS-LHR	2.63	2	Published

34	A cross VM network channel attacks on cloud model with counter measures	<b>Atif Saeed, Dr. Asad Hussain,</b> Peter Garraghan,	IEEE transaction of Dependable and secure computing		10.1109/TDSC.2020.3037022	CS-LHR	6.89	2	Published
35	Toward Offloading Internet of Vehicles Applications in 5G Networks	Renhao Gu, <b>Tariq Umer,</b> Khaled Salah, Xiaolong Xu	IEEE Transactions on Intelligent Transportation Systems		1 - 9	CS-LHR	6.319	1	Published
36	Some Topological Invariants of Graphs Associated with the Group of Symmetries	Chang-Cheng Wei, Muhammad Salman, Usman Ali, Masood Ur Rehman, Muhammad Aqeel Ahmad Khan, <b>Muhammad Hasanain Chaudary, and Farooq Ahmad</b>	Hindawi Journal: Journal of Chemistry	Volume 2020, Published: 09 Mar 2020	01-12 / Article ID 6289518 /Digital Object Identifier: 10.1155/2020/6289518	CS-LHR	1.79	2	Published
37	Trust-based energy-efficient routing protocol for Internet of things-based sensor networks	Muhammad Ilyas, Zahid Ullah, Fakhri Alam Khan, <b>Muhammad Hasanain Chaudary,</b> Muhammad Sheraz Arshed Malik, Zafar Zaheer and Hamood Ur Rehman Durrani	SAGE Journals: International Journal of Distributed Sensor Networks	Volume 16, Issue 10, Published: 08 October 2020	01-20 / Digital Object Identifier: 10.1177/1550147720964358	CS-LHR	1.151	1	Published

38	An Intelligent Recommender and Decision Support System (IRDSS) for Effective Management of Software Projects	I.Hamid, Muhammad, <b>Furkh Zeshan, Adnan Ahmad, Farooq Ahmad</b> , Ali Hamza, Zuhaib Ashfaq Khan, Saima Munawar, and Hanan Aljuaid	IEEE Access	Vol 8, (2020)	140752-140766	CS-LHR	4.098	3	Published
39	A Collaborative Method for Protecting Teens Against Online Predators Over Social Networks: A Behavioral Analysis	Samreen, Alia, <b>Adnan Ahmad, Furkh Zeshan, Farooq Ahmad</b> , Sohaib Ahmed, and Zuhaib Ashfaq Khan	IEEE Access	Vol 8, (2020)	174375-174393	CS-LHR	4.098	3	Published
40	A Globally Regularized Joint Neural Architecture for Music Classification	Ashraf, Mohsin, Guohua Geng, Xiaofeng Wang, <b>Farooq Ahmad</b> , and Fazeel Abid	IEEE Access	Vol 8, (2020)	220980-220989	CS-LHR	4.098	1	Published
41	Traffic Accident Detection and Condition Analysis Based On Social Networking Data	F. Ali, <b>A. Ali</b> , M. Imran, R.A. Naqvi, M.H. Siddiqi and K.S. Kwak	Accident Analysis and Prevention	vol. 151	10.1016/j.aap.2021.105973	CS-LHR	3.655	1	Published

42	An Intelligent Health-care Monitoring Framework Using Wearable Sensors and Social Networking Data	F. Ali, S.E. El-Sappagh, S.M. Islam, <b>A. Ali</b> , M. Attique, M. Imran, K. S. Kwak	Future Generation Computer Systems	vol. 114	pp. 23-43	CS-LHR	6.1	1	Published
43	Dynamic Wireless Information and Power Transfer Scheme for Nano-Empowered Vehicular Networks	L. Feng, <b>A. Ali</b> , M.Iqbal, F. Ali, <b>I.Raza</b> , M. H. Siddiqi, M. Shafiq, and <b>S.A. Hussain</b>	IEEE Transactions on Intelligent Transportation Systems		12-Jan	CS-LHR	6.319	3	Published
44	IoV-based Deployment and Scheduling of Charging Infrastructure in Intelligent Transportation Systems	W. Ejaz, M. Naeem, S. Sharma, A. M. Khattak, M.R. Ramzan, <b>A. Ali</b> , and A. Anpalagan	IEEE Sensors Journal		DOI: 10.1109/JSEN.2020.3006706	CS-LHR	3.073	1	Online Published
45	Artificial Neural Network-based Ensemble Approach for Multicultural Facial Expressions Analysis	G. Ali, <b>A. Ali</b> , F. Ali, U. Draz, F. Majeed, S. Yasin, T. Ali, N. Haider	IEEE Access	vol. 8	pp. 134950-134963,	CS-LHR	3.745	1	Published

46	Evaluation of the Challenges in the Internet of Medical Things with Multicriteria Decision Making (AHP and TOPSIS) to Overcome Its Obstruction under Fuzzy Environment	Tariq, Muhammad Imran, Natash Ali Mian, <b>Abid Sohail</b> , Tahir Alyas, and Rehan Ahmad	Mobile Information Systems	Vol 2020, Special Issue	Article ID 8815651, 19 pages	CS-LHR	1.508	1	Published
47	Glioma grading via analysis of digital pathology images using machine learning.	Rathore, S., Niazi, T., <b>Iftikhar, M. A.</b> , & Chaddad, A.	Cancers	12(3), Mar 2020	578	CS-LHR	6.16	1	Published
48	Multimodal Ensemble-Based Segmentation of White Matter Lesions and Analysis of Their Differential Characteristics across Major Brain Regions	Rathore, S., Niazi, T., <b>Iftikhar, M. A.</b> , Singh, A., Rathore, B., Bilello, M., & Chaddad, A.	Applied Sciences	10(6), Mar 2020	1903	CS-LHR	2.47	1	Published

49	Angle Adjustment for Vertical and Diagonal Communication in Underwater Sensor	Aimen Anum, Tariq Ali, <b>Shuja Akbar</b> , <b>Iqra Obaid</b> , <b>Muhammad Junaid Anjum</b> , Umar Draz , <b>Momina Shaheen</b>	International Journal of Advanced Computer Science and Applications(IJACSA)	Vol: 11	604-616	CS-LHR	0.71	4	Published
50	A delegation model for SDN-driven federated cloud	<b>Ahmad, A.</b> , Alzahrani, S., Ahmed, N. and Ahsan, T	Alexandria Engineering Journal	Volume 59, Issue 5	Pages 3653-3663	CS-LHR	2.46	1	Published
51	An intelligent decision support system for effective handling of IT projects	Hamid, M., <b>Zeshan, F.</b> , <b>Ahmad, A.</b> , Munawar, S., Aimeur, S., and Ahmed, S	Journal of Intelligent & Fuzzy Systems	VOL 38, Issue 3	pp. 2635-2647	CS-LHR	1.851	2	Published
52	Risk-free WHO grading of Astrocytoma using Convolutional Neural Networks from MRI Images	Ghulam Gilanie, <b>Usama Ijaz Bajwa*</b> , Mustansar Mahmood Waraich, <b>Muhammad Waqas Anwar</b>	Multimedia Tools and Applications	Vol. 80, Issue: 3	pp. 4295-4306	CS-LHR	2.313	2	Published

53	Skin Disease Classification using Neural Network	<b>U I Bajwa*</b> , S Alam, N Haq, N I Ratyal, <b>M W Anwar</b>	Current Medical Imaging	Volume 16, Issue 6	711 - 719	CS-LHR	0.533	2	Published
54	Melanoma Detection and Classification using Computerized Analysis of Dermoscopic Systems: A Review	<b>Nasir, Muhammad;</b> Khan, Muhammad A.; Sharif, Muhammad; Javed, Muhammad Younus; Saba, Tanzila; Ali, Hashim; Tariq, Junaid	Current Medical Imaging	Volume 16, Number 7	pp. 794-822(29)	CS-LHR	0.812	1	Published
55	Blockchain-based decentralized workload and energy management of geodistributed data centers	Sara Sajid, Muhammad Jawad, <b>Kanza Hamid,</b> Muhammad U.S. Khan, Sahibzada M.Ali, Assad Abbas, Samee U.Khan	Sustainable Computing: Informatics and Systems	Vol: 29	pp: 100461	CS-LHR	2.798	1	Published
56	Detecting Spam Product Reviews in Roman Urdu Script	N. Hussain, <b>H. T. Mirza*</b> , F. Iqbal, I. Hussain and M. Kaleem	The Computer Journal, Oxford University Press, The British Computer Society	bxaa164	pp: bxaa164	CS-LHR	1.077	1	Published

58	A Secure Data Dissemination in a DHT-based Routing Paradigm for Wireless Ad Hoc Network”	Rukhsana Kousar, Majed Alhaisoni, <b>Shahbaz Akhtar Abid</b> , Nadir Shah, Aamir Qamar, and Ahmad Karim	Wireless Communications and Mobile Computing, Wiley/Hindawi	Vol 2020, Special Issue	https://doi.org/10.1155/2020/2740654	CS-LHR	1.39	1	Published

### CONFERENCE PAPER

1. Maria Khan, **Ghulam Rasool** “Recovery of Mobile Game Design Patterns” International Arab Conference on Information Technology (ACIT'2020), November 2020.
2. **Junaid anjum, Momina Shaheen**, "Usability Engineering Process for Medical Devices", "Proceedings of the Future Technologies Conference (FTC) 2020".
3. **Abid Sohail**, Sehar Zia, **Abdul Qayyum Khan, Muhammad Shahid Bhatti, Muhammad Usman Akram** and Muhammad Imran Tariq, “From Enhanced ER to Multidimensional Model: A Methodology for Data Warehouse Design” in Proceedings of SOFA Conferences Arad (Romania), Advances in Intelligent Systems and Computing, (AISC), Springer Berlin, Germany November 2020 , in Press (ISI, SCOPUS)
4. **Abid Sohail**, Saman Abdi, **Abdul Qayyum Khan, Muhammad Shahid Bhatti**, Aysha Abid and Muhammad Imran Tariq, “Taxonomy of Business Process Management: A Social Network Analysis based Systemic Literature Exploration”, in Proceedings of SOFA Conferences Arad (Romania), Advances in Intelligent Systems and Computing, (AISC), Springer Berlin, Germany November 2020 , in Press (ISI, SCOPUS)
5. **Abid Sohail**, Sehar Ali, Muhammad Arif Butt, Muhammad Khurram Shehzad Rana , Muhammad Shakeel Anjum and Muhammad Imran Tariq , “Lifestyle Monitoring of Diabetic Patients using Business Process on Social Media”, in Proceedings of SOFA Conferences Arad (Romania), Advances in Intelligent Systems and Computing, (AISC), Springer Berlin, Germany November 2020 , in Press (ISI, SCOPUS)
6. Samreen, A., **Ahmad, A., & Zeshan, F.** (2020). Searching for Truth in the Post-Truth age. IEEE International Conference on Advancements in Computational Sciences, Pakistan. 17-19 Feb. 2020. DOI: 10.1109/ICACS47775.2020.9055948
7. Sareya Qayyum, Nimra Aziz, **Muhammad Waqas Anwar and Usama Ijaz Bajwa**, “Comparison of Parsers Dealing with Text Ambiguity in Natural Language Processing ”, in proceedings of 7th International Conference on Language and Technology, PP: 29-35, 19th - 21st February, 2020, UET, Lahore, Pakistan